

whereby said method UV-stabilizing hindered piperidine groups are chemically reacted into the coating.

6. A method of making a sprayable urethane coating composition that is impact resistant and gloss-stable upon exposure to ultraviolet radiation when applied to and cured over a suitable substrate, which composition comprises less than about fifty weight percent non-volatile constituents, the method comprising the steps of reacting in suitable solvents and in terms of chemically equivalent amounts from about 0.1 to 0.5 chemical equivalents of monohydroxyl piperidinol per chemical equivalent of polyfunctional aliphatic isocyanate to produce an isocyanate prepolymer having piperidine end groups; reacting said prepolymer with substantially chemically equivalent amounts of polyether diol and polyether triol, the sum of the total equivalents of the polyols being in the range of from about 1.4 to 5.0 times the total chemical equivalents of said polyfunctional isocyanate to form a urethane resin having unreacted functional hydroxyl groups; adding to said resin an amount of partially methylolated melamine sufficient to cure said coating composition by crosslinking said urethane resin at the hydroxyl groups; adding a catalytic amount of a weak acid compatible with the coating composition to accelerate the crosslinking reaction of said melamine; whereby said method the piperidinol constituent is incorporated into the composition by stable urethane bonds to provide a said cured coating

composition with resistance to degradation caused by exposure to ultraviolet radiation.

7. A method of making a high gloss urethane coating composition that is suitable for automotive topcoat applications due to its gloss stability upon extended exposure to sunlight and weather comprising the steps of reacting on a weight basis 100 parts methylene bis(4-cyclohexyl isocyanate) and from about 10-30 parts 2,2,6,6-tetramethyl-4-piperidinol to form a piperidine terminated isocyanate prepolymer; reacting with said prepolymer from about 100-250 weight parts polypropylene oxide diol having an average molecular weight of from about 350-1500 grams per mole and from about 50-150 parts polyether triol having an average molecular weight of from about 300-2500 grams per mole to form a urethane binder resin having free functional hydroxyl groups; and adding to said resin about 350-450 parts trimethylolated melamine and at least about 2 weight percent of said melamine of pyrophosphoric acid, said melamine serving to crosslink said resin at the hydroxyl groups when the coating composition is heated and said acid serving to catalyze said cure; whereby said method the piperidinol constituent is reacted into the coating composition by means of stable urethane linkages to prevent deterioration of gloss due to exposure to ultraviolet radiation.

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